AMENDMENTS TO THE CLAIMS

37. A balloon expandable stent prosthesis for delivery through an access artery for implantation in a coronary artery body passageway, the stent prosthesis comprising:

a plurality of thin-walled tubular members, each having first and second ends and a wall defining an outer wall surface disposed between the first and second ends, the wall having a substantially uniform thickness and a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of each tubular member, said wall having at least one coating applied thereto that contains a drug that is capable of being released into the coronary artery body passageway at the site of implantation;

at least one connector member being disposed between adjacent tubular members to flexibly connect adjacent tubular members;

each tubular member having a first diameter which permits intraluminal delivery of the tubular members into a coronary artery body passageway having a lumen; and

the tubular members having a second, expanded and deformed diameter, upon the application from the interior of the tubular members of a radially, outwardly extending force by expansion of a balloon, which second diameter is variable and dependent upon the amount of force applied to the tubular members, whereby the tubular members may be expanded and deformed to expand the lumen of the coronary artery body passageway at the site of implantation.

42. The stent prosthesis of claim 37, wherein the coating further comprises a polymer.

44. The stent prosthesis of claim 37, wherein the coating further comprises a plurality of openings to allow communication between the coronary artery body passageway and the interior of the tubular member.

45. The stent prosthesis of claim 43, wherein the absorbable polymer is selected from a group that comprises polyglycolides, polylactides, and copolymers thereof.

52. A method for implanting a plurality of balloon expandable stent prostheses within a passageway of a coronary artery; comprising the steps of:

disposing at least one connector member between adjacent stent prostheses to flexibly connect adjacent stent prostheses to each other;

disposing the plurality of connected stent prostheses upon a catheter having an inflatable balloon portion;

placing at least one coating on a wall of at least one of the stent prostheses that contains a drug that is released into the coronary artery body passageway at the site of implantation;

inserting the stent prostheses and catheter within the coronary artery body passageway by percutaneous catherization;

delivering the stent prostheses and the catheter to the site of implantation without surgically exposing the site of implantation; and

providing controllable expansion of at least one of the stent prostheses at the site

of implantation within the coronary artery passageway by expanding the inflatable balloon portion of the catheter associated with the at least one of the stent prostheses to force at least one of the at least one of the stent prostheses radially outwardly into contact with the coronary artery, by deforming a portion of the at least one stent prostheses with a force in excess of the elastic limit of the portion of the at least one stent prostheses, to implant the at least one stent prostheses within the coronary artery passageway.

53. The method of claim 52, further including the step of disposing the at least one connector member in a non-parallel relationship with respect to the longitudinal axis of adjacent stent prostheses.

54. The method of claim 52, including the step of utilizing a thin-walled, tubular member as each stent prosthesis, each tubular member having a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of the tubular member.

59. The method of claim 52, wherein the adjacent prostheses are elongated.

61. The method of claim 52, wherein the coating further comprises a polymer.

63. The method of claim 52, wherein the coating further comprises a plurality of openings to allow communication between the coronary artery body passageway and the interior of the stent prostheses.

65. The method of claim 62, wherein the absorbable polymer is selected from a group that comprises polyglycolides, polylactides, and copolymers thereof.